

## II. CLAIM AMENDMENTS

1-13. (Cancelled)

14. (Currently Amended) A method of demultiplexing a multiplexed signal, said multiplexed signal comprising packet data units, the packet data units including data packets belonging different logical channels, the packet data units being delimited by framing flags, the method comprising:

searching for said framing flags from a received multiplexed signal and de-framing the packet data units with reference to the framing flags;

demultiplexing the data packets belonging to the different logical channels from the packet data units and assembling them into demultiplexed signals,

detecting ~~possible~~ invalidity of a demultiplexed signal by examining errors encountered while de-framing the packet data units;

adding error location to the demultiplexed signal, the error location information indicating the location of erroneous bits in the demultiplexed signal; and

forwarding a ~~possibly invalid demultiplexed~~ signal to a corresponding decoder for the logical channel and further providing the decoder with an error type indication ~~for~~

use by the decoder during decoding of the demultiplexed signal to enable recovery from the error.

15. (Canceled)

16. (Currently Amended) A method according to claim ~~15~~14, wherein the error location information comprises a table of error locations.

17. (Currently Amended) A method according to claim ~~15~~14, wherein if ~~it is not possible to the determine determination~~ of the location of erroneous bits in the demultiplexed signal fails, a general error indication is forwarded to the decoder.

18. (Previously Presented) A method according to claim 14, further comprising adding the error type indication to the demultiplexed signal.

19. (Canceled)

20. (Currently Amended) A method according to claim ~~19~~14, wherein the error location information comprises a table of error locations.

21-23. (Cancelled)

24. (Previously Presented) A method according to claim 14, wherein said framing flags are HDLC flags used in HDLC-type framing.

25. (Previously Presented) A method according to claim 14, wherein said framing flags are PN flags used in PN-type framing.

26-27. (Cancelled)

28. (Currently Amended) A method according to claim 14, wherein the step of detecting ~~possible~~ invalidity of a demultiplexed signal by examining errors encountered while de-framing the packet data units comprises:

assembling data packets belonging to a particular logical channel into a data segment having an associated sequence number; and

checking the validity of said sequence number in order to determine whether a data packet belonging to said particular logical channel is missing. 29. (Previously Presented) A method according to claim 28, wherein said data segment is an AL-PDU.

29. (Previously Presented) A method according to claim 28, wherein said data segment is an AL-PDU.

30. (Previously Presented) A method according to claim 28, wherein when it is determined that a data packet belonging to said particular logical channel is missing, the method further comprises substituting the missing data packet with an empty data packet.

31. (Previously Presented) A method according to claim 28, wherein when it is determined that a data packet belonging to said particular logical channel is missing, an error type indication indicative of a missing data packet is forwarded to the corresponding decoder for the particular logical channel.

32. (Currently Amended) A method according to claim 14, wherein the step of detecting ~~possible~~ invalidity of a demultiplexed signal by examining errors encountered while de-framing the packet data units comprises checking for illegal bit combinations in a packet data unit.

33. (Cancelled)

34. (Currently Amended) A method according to claim 14, wherein the step of detecting ~~possible~~ invalidity of a demultiplexed signal by examining errors encountered while de-framing the packet data units comprises checking an assumed header portion of a packet data unit for errors.

35. (Cancelled)

36. (Currently Amended) A method according to claim 14, wherein the step of detecting ~~possible~~-invalidity of a demultiplexed signal by examining errors encountered while de-framing the packet data units comprises:

assembling data packets belonging to a particular logical channel into a data segment; and

checking the length of said data segment against a predetermined maximum length for said data segment.

37. (Previously Presented) A method according to claim 36, wherein when it is determined that the length of said data segment exceeds said predetermined maximum length, an error type indication indicative of a concatenation of data packets is forwarded to the corresponding decoder for the particular logical channel.

38. (Cancelled)

39. (Currently Amended) A method according to claim 14, wherein the step of detecting ~~possible~~-invalidity of a demultiplexed signal by examining errors encountered while de-framing the packet data units comprises searching for a shifted location of the starting point of a data packet belonging to a particular logical channel.

40. (Previously Presented) A method according to claim 39, wherein when it is determined that the starting point of a data packet belonging to a particular logical channel is shifted, an error type indication indicative of a shifted data packet is forwarded to the corresponding decoder for the particular logical channel.

41. (Previously Presented) A method according to claim 40, wherein when it is determined that the starting point of a data packet belonging to a particular logical channel is shifted, the method further comprises indicating the shifted location of the starting point of the data packet to the corresponding decoder for the particular logical channel.

42. (Currently Amended) A device for demultiplexing a multiplexed signal, said multiplexed signal comprising packet data units, the packet data units including data packets belonging to different logical channels, the packet data units being delimited by framing flags, said device comprising:

an input for receiving the multiplexed signal,

a processor; and

a set of outputs for forwarding demultiplexed signals to corresponding decoders,

the device being arranged to:

search for said framing flags from a received multiplexed signal and to de-frame the packet data units with reference to the framing flags;

demultiplex the data packets belonging to different logical channels from the packet data units and assemble them into demultiplexed signals,

detect ~~possible~~ invalidity of a demultiplexed signal by examining errors encountered while de-framing the packet data units;

add error location information to the demultiplexed signal,  
the error location information indicating the location of  
erroneous bits in the demultiplexed signal; and

forward a ~~an~~ ~~possibly~~ invalid demultiplexed signal to the corresponding decoder for the logical channel and further provide the decoder with an error type indication for use by the decoder during decoding of the demultiplexed signal to enable recovery from the error.

43. (Canceled)

44. (Currently Amended) A device according to claim ~~43~~42, arranged to forward a general error indication to the decoder if ~~it is not possible to the determine~~ determination of the location of erroneous bits in the demultiplexed signal fails.

45. (Previously Presented) A device according to claim 42, further arranged to add the error type indication to the demultiplexed signal.

46-50. (Cancelled)

51. (Currently Amended) A device according to claim 42, arranged to detect ~~possible~~—invalidity of a demultiplexed signal by assembling data packets belonging to a particular logical channel into a data segment having an associated sequence number and checking the validity of said sequence number in order to determine whether a data packet belonging to said particular logical channel is missing.

52. (Previously Presented) A device according to claim 51, arranged to substitute a missing data packet with an empty data packet.

53. (Previously Presented) A device according to claim 51, arranged to forward an error type indication indicative of a missing data packet to the corresponding decoder when it is determined that a data packet belonging to said particular logical channel is missing.

54. (Currently Amended) A device according to claim 42, arranged to detecting ~~possible~~—invalidity of a demultiplexed signal by checking for illegal bit combinations in a packet data unit.



55. (Cancelled)

56. (Currently Amended) A device according to claim 42, arranged to detect ~~possible~~—invalidity of a demultiplexed signal by checking an assumed header portion of a packet data unit for errors.

57. (Cancelled)

58. (Currently Amended) A device according to claim 42, arranged to detect ~~possible~~—invalidity of a demultiplexed signal by:

assembling data packets belonging to a particular logical channel into a data segment; and

checking the length of said data segment against a predetermined maximum length for said data segment.

59. (Previously Presented) A device according to claim 58, arranged to forward an error type indication indicative of a concatenation of data packets to the corresponding decoder for the logical channel when it is determined that the length of said data segment exceeds said predetermined maximum length.

60. (Cancelled)

61. (Currently Amended) A device according to claim 42, arranged to detect ~~possible~~ invalidity of a demultiplexed signal by searching for a shifted location of the starting point of a data packet belonging to a particular logical channel.

62. (Previously Presented) A device according to claim 61, arranged to forward an error type indication indicative of a shifted data packet to the corresponding decoder for the particular logical channel when it is determined that the starting point of a data packet belonging to a particular logical channel is shifted.

63. (Previously Presented) A device according to claim 62, arranged to indicate the shifted location of the starting point of the data packet to the corresponding decoder for the particular logical channel.

64. (Currently Amended) A multimedia terminal comprising a demultiplexor for demultiplexing a multiplexed signal, said multiplexed signal comprising packet data units including data packets belonging to different logical channels, the packet data units being delimited by framing flags, said demultiplexor comprising:

an input for receiving a multiplexed signal;

a processor; and

a set of outputs for forwarding demultiplexed signals to corresponding decoders,

the multiplexor being arranged to:

search for said framing flags from a received multiplexed signal and to de-frame the packet data units with reference to the framing flags;

demultiplex the data packets belonging to different logical channels from the packet data units and assemble them into demultiplexed signals,

detect ~~possible~~ invalidity of a demultiplexed signal by examining errors encountered while de-framing the packet data units;

add error location information to the demultiplexed signal,  
the error location information indicating the location of  
erroneous bits in the demultiplexed signal; and

forward a ~~possibly~~ invalid demultiplexed signal to the corresponding decoder for the logical channel and further provide the decoder with an error type indication for use by the decoder during decoding of the demultiplexed signal to enable recovery from the error.

65. (Previously Presented) A multimedia terminal according to claim 64, further comprising a video decoder, wherein the video decoder is adapted to use error type indications

provided by the demultiplexor to conceal errors in a demultiplexed video data signal.

66. (Canceled)

67. (Currently Amended) A multimedia terminal according to claim 64~~6~~, comprising a video decoder, wherein the video decoder is adapted to use error location information provided by the demultiplexor to conceal errors in a demultiplexed video data signal.

68. (Cancelled)

69. (Previously Presented) A method according to claim 15, wherein the error location information is determined by analysing de-framing data obtained by de-framing more than one contiguous packet data unit.

70. (Currently Amended) A method according claim 14, wherein the step of detecting ~~possible~~ invalidity of a demultiplexed signal by examining errors encountered while de-framing the data units comprises checking information in the packet data unit relating to the size of the data belonging to the different logical channels.

71. (Previously Presented) A method according to claim 36, wherein the data segment is a MUX-SDU.

72. (Currently Amended) A device according to claim—~~43~~42, arranged to determine the error location information by analysing de-framing data obtained by de-framing more than one contiguous packet data unit.

73. (Currently Amended) A device according claim 42, arranged to detect ~~possible~~—invalidity of a demultiplexed signal by checking information in the packet data unit relating to the size of the data belonging to the different logical channels.